MEMO

Date: March 19, 2009
To: ABAG Finance & Personnel Committee
From: Paul Fassinger, Research Director
Re: Computer Hardware Purchase for PECAS Land Use Modeling System

Summary

Staff requests authorization of $25,000 to purchase an HP multi-core server required to run the PECAS modeling software.

This item is on the Executive Board agenda as a consent item.

Background

The server would be purchased under California's Western States Contracting Alliance contract. The amount required for the purchase is up to $25,000. The hardware specifications and costs are based on those from other regional agencies running the PECAS modeling software.

Staff is currently working with the UC Davis Information Center for the Environment to develop a land use forecasting model for the Bay Area region using the PECAS modeling software. Because of its complexity, this model requires a multi-core server to operate.

AGENDA ITEM 9

MEMO

Date: March 19, 2009
To: ABAG Finance & Personnel Committee
From: Paul Fassinger, Research Director PF
Re: PECAS Land Use Modeling System

Summary

Staff is requesting authorization to enter into a sole source agreement for computer software and training in an amount up to $500,000. The software is needed to meet new land use modeling requirements. Any agreement would be made in phases in order to ensure that funding from state and federal sources have been identified.

This item is on the Executive Board agenda as a consent item.

Background

Staff requests authorization to enter into an agreement with Mike McCoy, Co-Director of the UC Davis Information Center for the Environment, in an amount up to $500,000 for computer software and training. The agreement is being made on a sole source basis due to the uniqueness of the software. This agreement will be in phases and will only be executed as funds are made available.

Funding for this agreement comes from two Caltrans grants. The first grant, in the sum of $300,000, has already been awarded to ABAG and Mike McCoy. The second grant application will be due to Caltrans on April 1, 2009.

This computer software provides ABAG with improved land use models needed to meet the California Transportation Commission guidelines, and the requirements of SB 375. The software is called PECAS. PECAS stands for Production, Exchange and Consumption Allocation System. PECAS is an integrated land use/transportation model that focuses on the movement of goods and people which will predict future development patterns and locations.

The benefits of PECAS include the compatibility with activity-based models as used by the Metropolitan Transportation Commission (MTC), the ability to forecast and analyze goods movement, and the ability to disaggregate demographic forecasts and to work at different geographic scales. An integrated model would be a great advantage over current models being used in the region for the purposes of planning and policy discussion.

The PECAS model is consistent with current modeling practices throughout the state. Caltrans has been using a PECAS model for its planning activities and all other major councils of governments in California have already started implementing the PECAS model for their forecasts and analysis work. These metropolitan planning organizations include Southern California Association of Governments (SCAG), San Diego Association of Governments (SANDAG), and Sacramento Area Council of Governments (SACOG). Each agency is using Mike McCoy for training in the PECAS model.

A PECAS model can be implemented in the time for our next round of forecasting. ABAG is beginning to work with MTC to implement model improvements for SB 375's Sustainable Community Strategy. The PECAS model can be implemented in the next few months which will allow us to begin testing the software and reconciling our results with MTC's transportation model.